

**WHAT IS CLAIMED IS:**

1. An orthopaedic reamer assembly, comprising:  
a reamer;  
a flexible shaft connected to said reamer, said flexible shaft having both a longitudinal axis and a longitudinal length, said flexible shaft being comprised of a rigid material, said  
5 flexible shaft having a low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length, said low ratio providing a flexibility in said flexible shaft.
2. The orthopaedic reamer assembly of claim 1, wherein said rigid material is comprised of polyether ether ketone.
3. The orthopaedic reamer assembly of claim 1, wherein said low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length is approximately between 0.0003 inches<sup>3</sup> to 0.000002 inches<sup>3</sup>.
4. The orthopaedic reamer assembly of claim 1, wherein said low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length is approximately between 0.0002 inches<sup>3</sup> to 0.00001 inches<sup>3</sup>.
5. The orthopaedic reamer assembly of claim 1, further including both a reamer end on said flexible shaft and an attachment element connected to said reamer end, said attachment element releasably connected to said reamer, said attachment element being comprised of a metal

material, said rigid material being comprised of a material from the group consisting of polymers  
5 and composites thereof.

6. The orthopaedic reamer assembly of claim 5, wherein said rigid material is comprised of polyether ether ketone.

7. The orthopaedic reamer assembly of claim 5, wherein said flexible shaft has a chuck end, said chuck end being made of metal.

8. The orthopaedic reamer assembly of claim 1, wherein said flexible shaft has a solid cross-section along said longitudinal length.

9. The orthopaedic reamer assembly of claim 1, wherein said flexible shaft has a tubular form.

10. The orthopaedic reamer assembly of claim 1, wherein said flexible shaft is fixedly attached to said reamer.

11. An orthopaedic driver for rotatably driving a reamer, comprising:  
a flexible shaft configured for connection to the reamer, said flexible shaft having both a longitudinal axis and a longitudinal length, said flexible shaft being comprised of a rigid material, said flexible shaft having a low ratio of an area moment of inertia about an axis  
5 perpendicular to said longitudinal axis versus said longitudinal length, said low ratio providing a flexibility in said flexible shaft.

12. The orthopaedic reamer assembly of claim 11, wherein said rigid material is comprised of polyether ether ketone.

13. The orthopaedic reamer assembly of claim 11, wherein said low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length is approximately between 0.0003 inches<sup>3</sup> to 0.000002 inches<sup>3</sup>.

14. The orthopaedic reamer assembly of claim 11, wherein said low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length is approximately between 0.0002 inches<sup>3</sup> to 0.00001 inches<sup>3</sup>.

15. The orthopaedic reamer assembly of claim 11, further including both a reamer end on said flexible shaft and an attachment element connected to said reamer end, said attachment element configured for releasable connection to the reamer, said attachment element being comprised of a metal material, said rigid material being comprised of a material from the group  
5 consisting of polymers and composites thereof.

16. The orthopaedic reamer assembly of claim 15, wherein said rigid material is comprised of polyether ether ketone.

17. The orthopaedic reamer assembly of claim 15, wherein said flexible shaft has a chuck end, said chuck end being made of metal.

18. The orthopaedic reamer assembly of claim 11, wherein said flexible shaft has a solid cross-section along said longitudinal length.

19. The orthopaedic reamer assembly of claim 11, wherein said flexible shaft has a tubular form.

20. A method of manufacturing an orthopaedic reamer, comprising the steps of:  
assembling a flexible shaft, said flexible shaft having both a longitudinal axis and a longitudinal length, said flexible shaft being comprised of a rigid material, said flexible shaft having a low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length, said low ratio providing a flexibility in said flexible shaft;  
5 connecting said flexible shaft to a reamer.

21. The method of claim 20, wherein said rigid material is comprised of polyether ether ketone.

22. The method of claim 20, wherein said flexible shaft is releasably connected to said reamer.

23. The orthopaedic reamer assembly of claim 20, wherein said low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length is approximately between 0.0003 inches<sup>3</sup> to 0.000002 inches<sup>3</sup>.

24. The orthopaedic reamer assembly of claim 20, wherein said low ratio of an area moment of inertia about an axis perpendicular to said longitudinal axis versus said longitudinal length is approximately between 0.0002 inches<sup>3</sup> to 0.00001 inches<sup>3</sup>.